USER'S INFORMATION MANUAL

ALPINE™

CONDENSING HIGH EFFICIENCY GAS - FIRED HOT WATER BOILER

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- **Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**

  WHAT TO DO IF YOU SMELL GAS

  - **Do not try to light any appliance.**
  - **Do not touch any electrical switch; do not use any phone in your building.**
  - **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
  - **If you cannot reach your gas supplier, call the fire department.**
- **Installation and service must be performed by a qualified installer, service agency or the gas supplier.**

AVERTISSEMENT. Assurez-vous de bien suivre les instructions données dans cette notice pour réduire au minimum le risque d'incendie ou d'explosion ou pour éviter tout dommage matériel, toute blessure ou la mort.

- **Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflam-mables dans le voisinage de cet appareil ou de tout autre appareil.**

  QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:

  - **Ne pas tenter d'allumer d'appareils.**
  - **Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones dans le bâtiment où vous vous trouvez.**
  - **Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.**
  - **Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.**
- **L'installation et l'entretien doivent être assuréx par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.**

U.S. Boiler Company

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The following terms are used throughout this manual to bring attention to the presence of hazards of various risk levels.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death, serious injury or substantial property damage.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury or property damage.

Basic Operation

DANGER

There are no user serviceable parts on this boiler. Attempts to service this boiler by someone other than a qualified gas service technician could void the warranty, cause property damage, personal injury or loss of life.

CAUTION

Should overheating occur or the gas supply fail to shut off, do not turn off or disconnect the electrical supply to the pump. Instead, shut off the gas supply at a location external to the appliance.
En cas de surchauffe ou si l'admission de gaz ne peut étre coupée, ne pas couper ni débrancher l'alimentation électrique de la pompe. Fermer plutôt le robinet d'admission de gaz à l'extérieur de l'appareil.

Do not use this boiler if any part has been under water. Immediately call a qualified service technician to inspect the boiler and to replace any part of the control system and any gas control which has been under water.

CAUTION

Like all central heating appliances, this boiler is equipped with safety devices, which could cause it to shutdown, requiring service to restore normal operation. Where such a shutdown could result in damage from low temperatures (such as frozen pipes), do not leave the heating system unattended during cold weather unless alarms or other safeguards are in place to prevent damage.

A. General

1. This manual covers the proper care and use of the Alpine™ (ALP) Condensing High Efficiency Gas Fired Boiler
2. Instructions to safely light and shut down this boiler are shown on page 4, as well as on a label affixed to the boiler. Control locations shown in Figure 1.
3. **The Alpine™ (ALP) boilers** use an electronic means built into the ignition system to extinguish the burner in the event that flames exit the combustion chamber. If the boiler fails to fire, call a qualified heating service agency to diagnose and correct the problem.
4. **Alpine™ (ALP) boilers –** These boilers are equipped with a safety feature which will shut down the burner in the event that there is a blockage in the vent system. In the event that the boiler fails to function, and the boiler is vented through an outside wall accessible from the ground, inspect the vent terminal on the outside wall for a blockage such as a bee's nest or ice. If a blockage is found, the burner should ignite approximately 30 seconds after the blockage is removed. If no blockage is found, or if the terminal is inaccessible from the ground, the problem must be diagnosed and corrected by a qualified gas service technician.

WARNING

In the event that the ignition system on an ALP boiler does not permit the boiler to fire, there is either a problem with the ignition system or a problem with the vent system. Call a qualified gas service technician to diagnose and correct the problem.

A shutdown of the burner due to the pressure switch is an indication that there is a problem with the vent system, such as a blockage. The boiler pressure switch should only be reset after a qualified gas service technician has diagnosed and corrected the venting problem that caused the blocked vent air proving switch to open.

B. Maintenance

1. Safe reliable operation of this boiler depends upon proper periodic maintenance.
2. The following should be done on a **continuous basis**:
   - Keep the area around the boiler free of objects, which are flammable.
   - Do not store or use sources of hydrocarbons such as bleaches, fabric softeners, paints, cleaners, refrigerants, and cat boxes near the boiler. Traces of these chemicals can be drawn into the boiler, causing severe corrosion damage to the boiler and/or objectionable odors.
   - Do not expose the boiler to large amounts of dust such as that generated by dry wall construction or woodworking.
3. A qualified gas service technician should perform the maintenance procedure shown in the installation manual on an **annual basis**.
4. The owner should visually inspect the venting system on a **monthly basis**. If any of the following conditions are found, the boiler should be shut down and a qualified gas service technician called to correct the problem before the boiler is placed back in service:
   - Loose joints, corrosion or other deterioration
   - Condensate leakage
   - Sags in horizontal runs of vent pipe
5. The owner should also perform a **monthly** visual inspection of the boiler and the surrounding system piping. To do this, remove the boiler jacket door. If any of the following are found, a qualified gas service technician should be consulted immediately:
   - Deterioration of the visible controls, wiring, and sheet metal components
   - Heating system water Leaks
   - Carbon (“soot”) in or near the burner compartment area
   - Make sure that the condensate drain system is unobstructed and leak tight.

CAUTION

The Alpine™ (ALP) has a heat exchanger made from a special stainless steel alloy which can be severely damaged by frequent additions of water or by the addition of boiler water additives which are not designed for use with stainless steel boilers. If it is necessary to add water to the boiler, have a service technician check the system for leaks. Do not add any chemicals to the boiler not listed in Section X of the Alpine™ (ALP) installation manual. Warranty is void if the service and maintenance procedure shown in Section XII of the Alpine™ (ALP) installation manual is not followed.

WARNING

Carbon (“soot”) in or near the burner compartment area is an indication of a potential carbon monoxide hazard. If carbon is found, the boiler should be shut down immediately and inspected by a qualified gas service technician. The cause of the sooting should be found and corrected before the boiler is restarted.

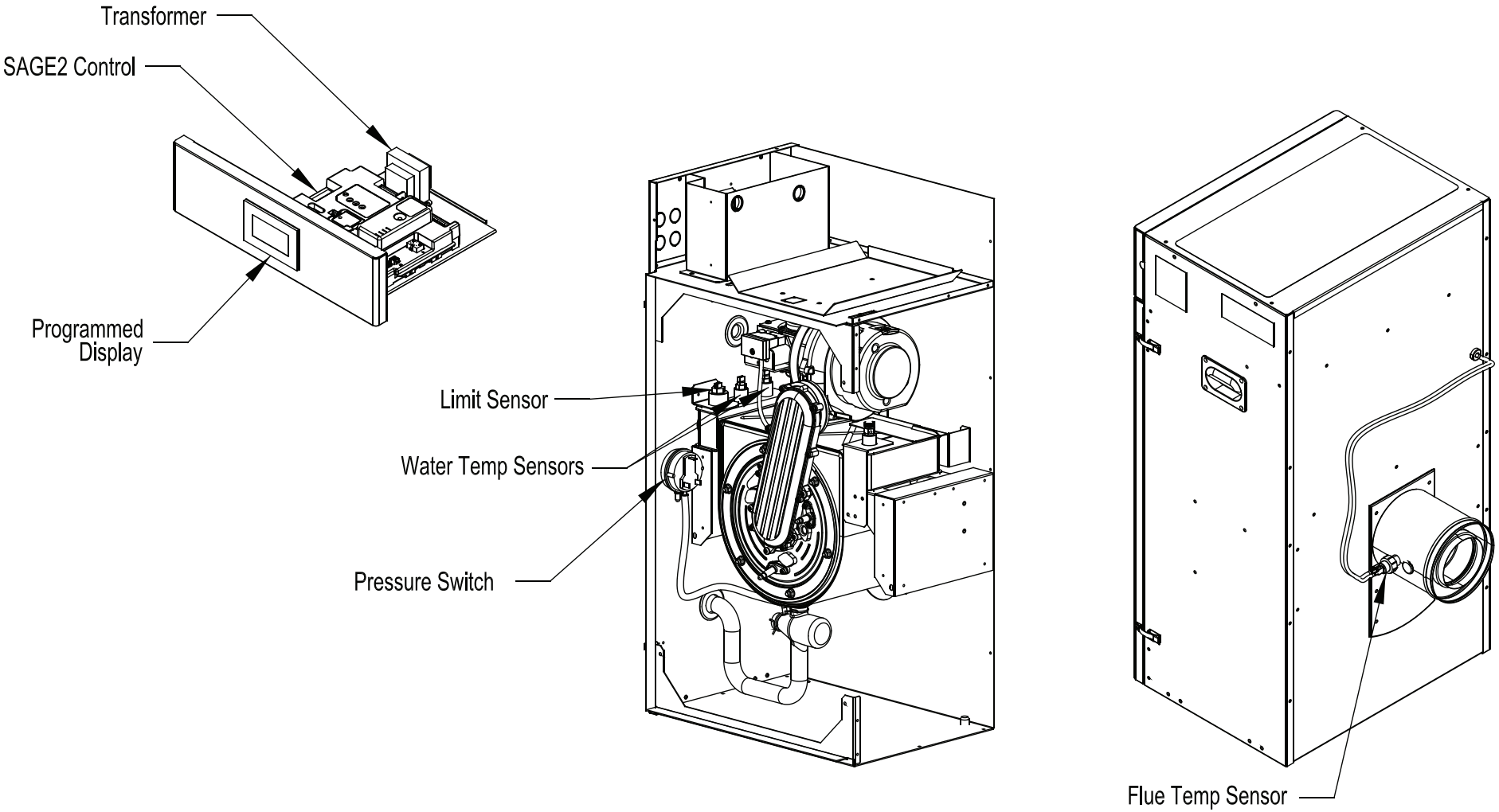


Figure 1: Control Locations (shown with optional concentric vent collar)

FOR YOUR SAFETY READ BEFORE OPERATING/POUR VOTRE SECURITE LISÉZ AVÁNT DE METTRE EN MARCHE

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

AVERTISSEMENT: Quiconque ne respecte pas à la lettre les instructions dans la présente notice risque de déclencher un incendie ou une explosion entraînant des dommages, des blessures ou la mort.

A. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.

B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

A. Cet appareil ne comporte pas de veilleuse. Il est muni d'un dispositif d'allumage qui allume automatiquement le brûleur. Ne tentez pas d'allumer le brûleur manuellement.

B. AVANT DE FAIRE FONCTIONNER, reniflez tout autour de l'appareil pour déceler une odeur de gaz. Reniflez près du plancher, car certains gaz sont plus lourds que l'air et peuvent s'accumuler au niveau du sol.

QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:

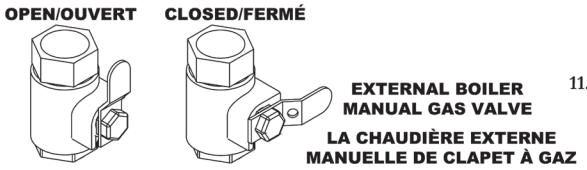
- **Ne pas tenter d'allumer d'appareil.**
- **Ne touchez à aucun interrupteur ; ne pas vous servir des téléphones se trouvant dans le bâtiment.**
- **Appelez immédiatement votre fournisseur de gaz depuis voisin. Suivez les instructions du fournisseur.**
- **Si vous ne pouvez rejoindre le fournisseur, appelez le service des incendies.**

C. Ne poussez ou tournez la manette d'admission du gaz qu'à la main ; ne jamais utiliser d'outil. Si la manette reste coincee, ne pas tenter de la réparer ; appelez un technicien qualifié. Le fait de forcer la manette ou de la réparer peut déclencher une explosion ou un incendie.

D. N'utilisez pas cet appareil s'il a été plongé dans l'eau, même partiellement. Faites inspecter l'appareil par un technicien qualifié et remplacez toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

OPERATING INSTRUCTIONS/INSTRUCTIONS DE FONCTIONNEMENT

1. STOP! Read safety information above (to the left) on this label.
2. Set the thermostat to lowest setting.
3. Turn off all electric power to the appliance.
4. This appliance is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
5. Turn the external boiler manual gas valve handle clockwise to close the gas supply.
6. Wait five (5) minutes** to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above (to the left) on this label. If you don't smell gas, go to the next step.
7. Turn the external boiler manual gas valve handle counterclockwise to open the gas supply.
8. Turn on all electric power to the appliance.
9. Set the thermostat to the desired setting.
10. Look at the control display panel, the first digit will show a series of numbers that indicate the boiler control sequence. A number (3) or (4) means that the burner is firing. The number (0) indicates that there is no call for heat from the thermostat or the domestic water heater.
11. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.



1. **ARRÊTEZ ! Lisez les instructions de sécûrité sur la portion supérieure (a gauche) cette étiquette.**
2. **Réglez le thermostat à la température la plus basse.**
3. **Coupez l'alimentation électrique de l'appareil.**
4. **Cet appareil est équipé de l' dispositif d'allumage qui automobile allume matically le brûleur. Ne pas essayer d'allumer le brûleur près main.**
5. **Tourner la chaudière externe manuelle poignée en clapet à gaz dans le sens des aiguilles d'une montre pour fermerl'offre de gaz.**
6. **Attendre cinq (5) minutes** pour laisser échapper tout le gaz. Reniflez tout autour de l'appareil, y compris près du plancher, pour déceler une odeur de gaz, ARRÊTEZ ! Passez à l'étape B des instructions de sécûrité sur la portion supérieure (a gauche) cette étiquette. S'il n'y a pas d'odeur de gaz, passez à l'étape suivante.**
7. **Tourner la chaudière externe manuelle compteur de poignée en clapet à gaz ouvrir dans le sens des aiguilles d'une montre le gaz approvisionnement.**
8. **Allumer toute l'énergie électrique au appareil.**
9. **Réglez le thermostat à la température désirée.**
10. **Regarder le panneau affichagecommande, le premier chiffre montrera une série de nombres qui indiquent la chaudière ordre d'exécution des instructions. Un nombre (3) ou (4) signifie que le brûleur est mise à feu. Le nombre (0) indique ce là n'est aucun appel pour la chaleur de le thermostat ou le domestique chauffe-eau.**
11. **Si l'appareil ne se met pas en marche, suivez les instructions intitulées « Comment couperl'admission de gaz de l'appareil » et appelez un technicien qualifié ou le fournisseur de gaz.**

TO TURN OFF GAS TO APPLIANCE/COMMENT COUPER L'ADMISSION DE GAZ DE L'APPAREIL

1. Set the thermostat to lowest setting.
2. Turn off all electirc power to the appliance if service is to be performed.
3. Turn the external boiler manual gas valve handle clockwise to close gas supply.

1. **Réglez le thermostat à la température la plus basse.**
2. **Coupez l'alimentation électrique de l'appareil s'il faut procéder à l'entretien.**
3. **Tourner la chaudière externe manuelle poignée en clapet à gaz dans le sens des aiguilles d'une montre pour fermerl'offre de gaz.**

Figure 2: Lighting Instructions

WARNING

Service on this boiler should be undertaken only by trained and skilled personnel from a qualified service agency. Inspections should be performed at intervals specified in Installation, Operating and Service Instructions and this manual. Maintain manuals in a legible condition.

Keep boiler area clear and free of combustible materials, gasoline and other flammable vapors and liquids.

Do not place any obstructions in boiler room that will hinder flow of combustion and ventilation air.

A. General Housekeeping (Continuous).

1. Keep boiler area clear and free of combustible materials and obstructions to the free flow of combustion and ventilation air to the boiler.
2. Do not store or use gasoline or other flammable vapors or liquids in the vicinity of the boiler or any other appliance.
3. Do not store or use sources of hydrocarbons in the vicinity of the boiler. Sources of hydrocarbons include bleaches, cleaners, chemicals, sprays, paint removers, fabric softeners and refrigerants.

B. Inspect Concentric Inlet Air/Vent System (Monthly).

1. Concentric Inlet Air/Vent Terminal must be free of obstruction and undamaged due to impact or excessive temperature.
2. Concentric Inlet Air/Vent Terminal exterior wall penetration must be weather tight.
3. Concentric Inlet Air/Vent pipe must be supported at maximum 5 ft interval and must not sag.
4. All Concentric external Inlet Air pipe joints must be secure and airtight.
5. All Concentric internal Vent pipe joints must be secure, gas tight and watertight.
6. Condensate drain must be free of obstruction and allow condensate to flow freely. If corrective action is required, contact your installer or qualified service agency.

C. Inspect burner Flames (Monthly).

1. Remove lower front door assembly.
2. Adjust thermostat to the highest setting to initiate boiler firing.
3. View burner flames through observation glass.
4. Check burner flames. See Figure 3. On high fire the flame should be stable and mostly blue. No true yellow tipping should be present, however intermittent flecks of yellow and orange in the flame, caused by dust in air, are normal.

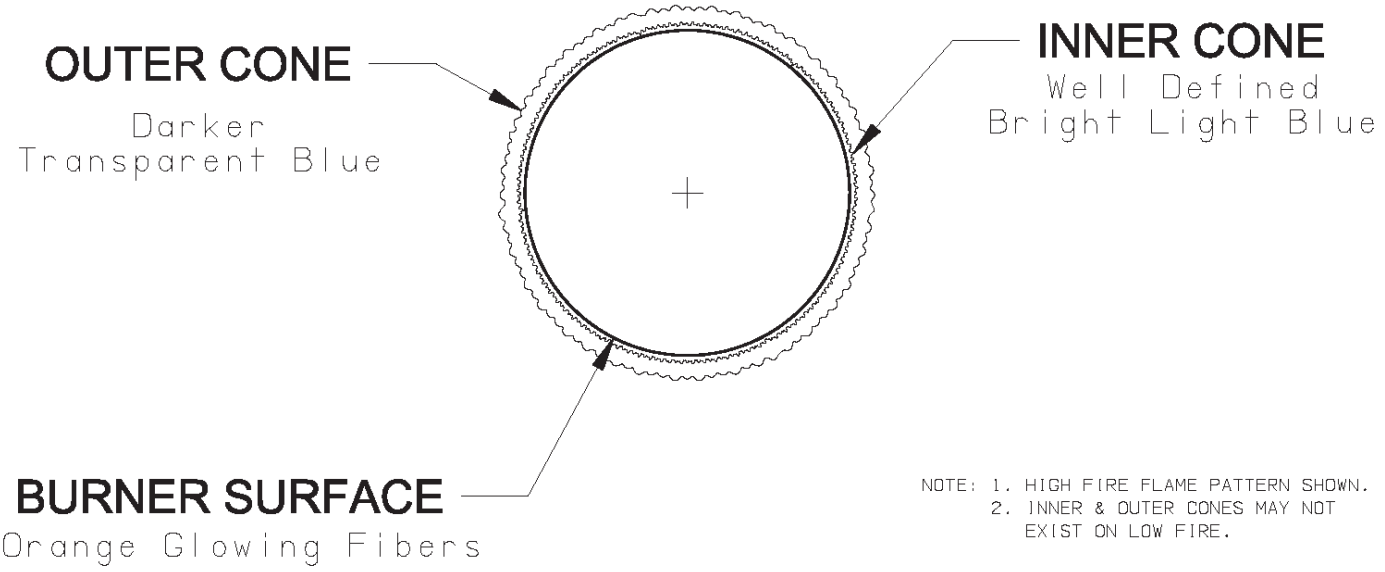


Figure 3: Burner Flame

5. If true yellow tipping is observed, follow instructions TO TURN OFF GAS TO APPLIANCE (see Figure 2) and contact your installer or qualified service agency.
6. If burner flames look satisfactory, adjust thermostat to the normal setting to stop boiler firing.

D. Schedule Inspection by Your Installer or Qualified Service Agency (Annually or at Beginning of Heating Season).

For continued safe operation either your installer, or a qualified service agency must provide a more detailed inspection of burner, heat exchanger, controls and vent system and provide maintenance as specified in Installation, Operating and Service Instructions.

All Alpine™ Series Repair Parts may be obtained through your local U.S. Boiler Wholesale distributor. Should you require assistance in locating a U.S. Boiler distributor in your area, or have questions regarding the availability of U.S. Boiler products or repair parts, please contact U.S. Boiler Customer Service at (717) 481-8400 or Fax (717) 481-8408.

Important Product Safety Information
Refractory Ceramic Fiber Product

Warning:

The Repair Parts list designates parts that contain refractory ceramic fibers (RCF). RCF has been classified as a possible human carcinogen. When exposed to temperatures about 1805°F, such as during direct flame contact, RCF changes into crystalline silica, a known carcinogen. When disturbed as a result of servicing or repair, these substances become airborne and, if inhaled, may be hazardous to your health.

AVOID Breathing Fiber Particulates and Dust

Precautionary Measures:

Do not remove or replace RCF parts or attempt any service or repair work involving RCF without wearing the following protective gear:

1. A National Institute for Occupational Safety and Health (NIOSH) approved respirator
2. Long sleeved, loose fitting clothing
3. Gloves
4. Eye Protection

- Take steps to assure adequate ventilation.
- Wash all exposed body areas gently with soap and water after contact.
- Wash work clothes separately from other laundry and rinse washing machine after use to avoid contaminating other clothes.
- Discard used RCF components by sealing in an airtight plastic bag. RCF and crystalline silica are not classified as hazardous wastes in the United States and Canada.

First Aid Procedures:

- If contact with eyes: Flush with water for at least 15 minutes. Seek immediate medical attention if irritation persists.
- If contact with skin: Wash affected area gently with soap and water. Seek immediate medical attention if irritation persists.
- If breathing difficulty develops: Leave the area and move to a location with clean fresh air. Seek immediate medical attention if breathing difficulties persist.
- Ingestion: Do not induce vomiting. Drink plenty of water. Seek immediate medical attention.